



***Charging Ahead
into the
Next Millennium***

DARPATech** '99**

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ISO

Strategic Cyber Defense

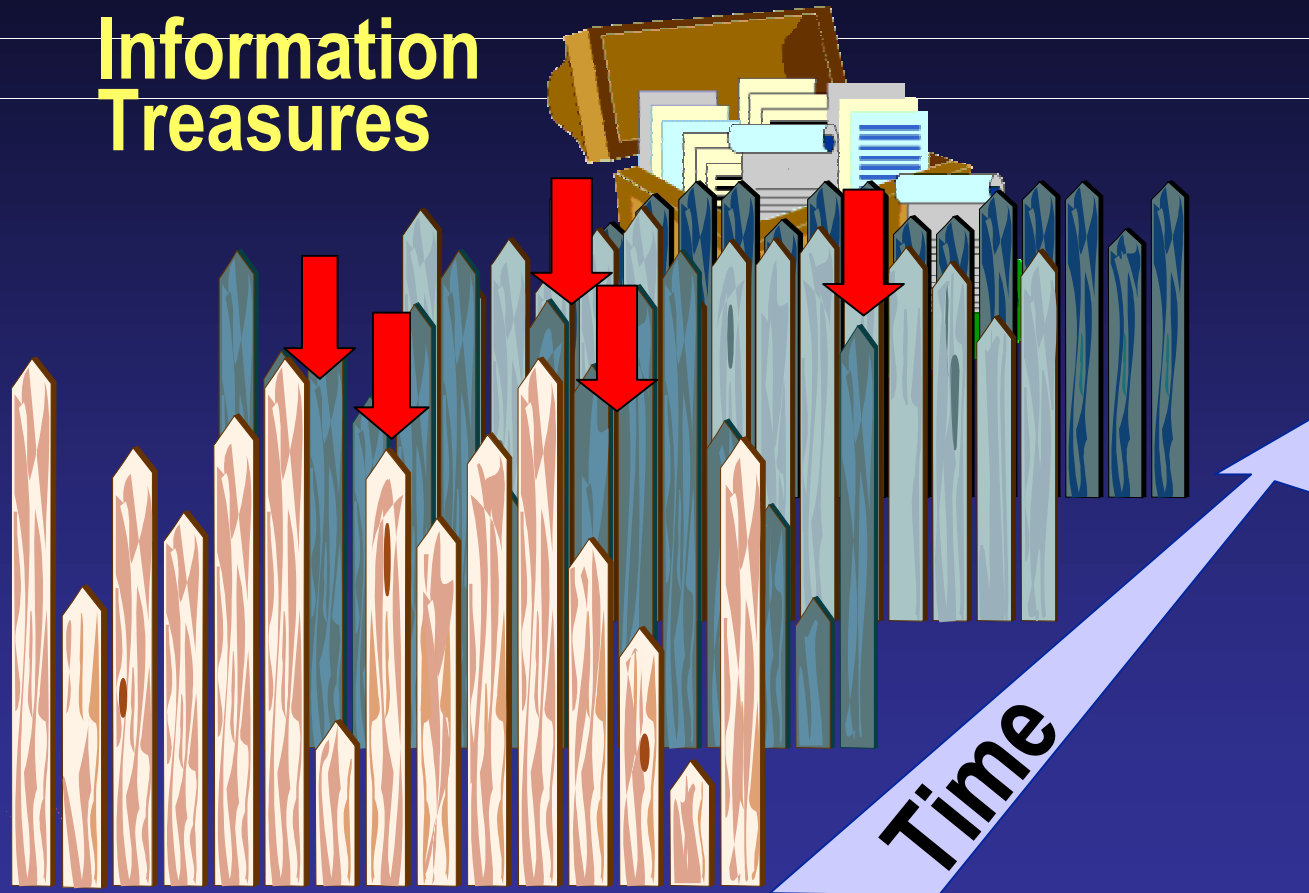
O. Sami Saydjari
Program Manager



Information Assurance

ISO

Information
Treasures



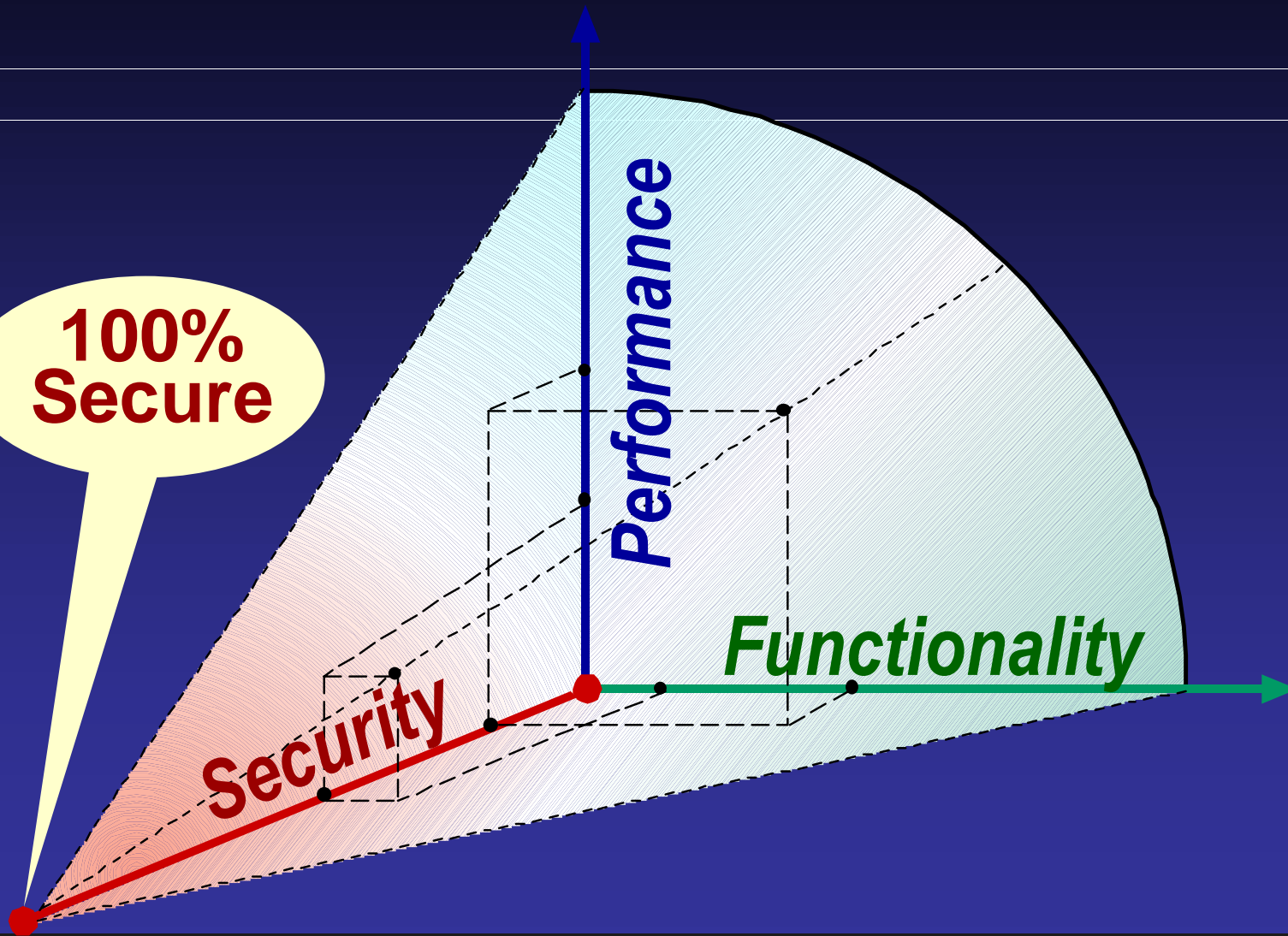
Risk-Balanced, Optimizing Strategy



ISO

Tradeoffs

**100%
Secure**





ISO

Challenging Questions

Commander's Attack Triage

- Am I under attack ?
- What is the nature of the attack ?
- What is mission impact ?
- When did attack start ?
- Who are the adversaries?
- What can I do about it ?
- What is the long term solution?



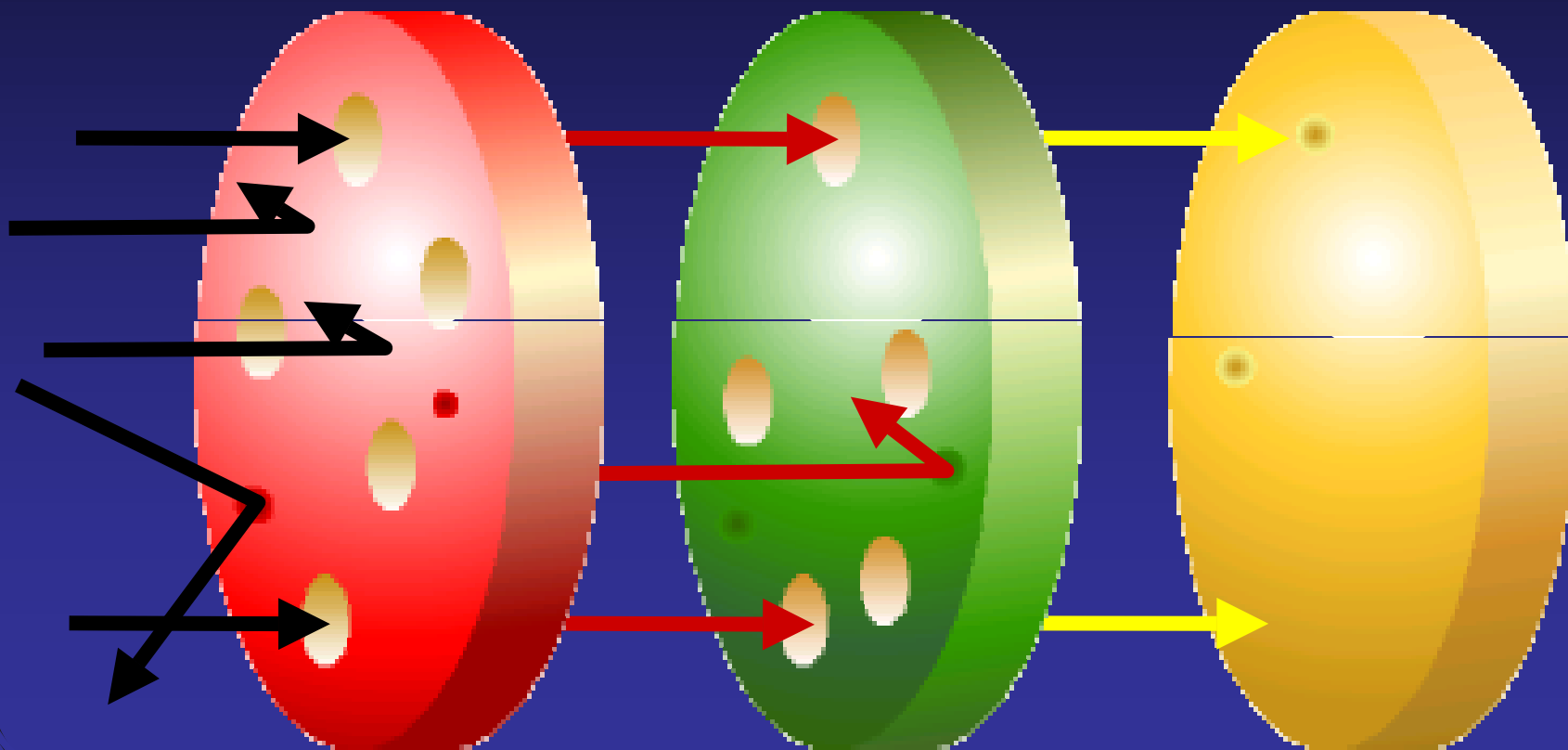
ISO

Layered Protection

Prevention

Detection

Tolerance





ISO

Game Theory





ISO

Strategic Cyber Defense

**Cyber Defense Strategy:
Nat'l Level I&W and Response Integration**

**Cyber
Sensors &
Exploitation**

**Cyber
State
Awareness**

**Cyber
Command &
Control**

Observe

Orient

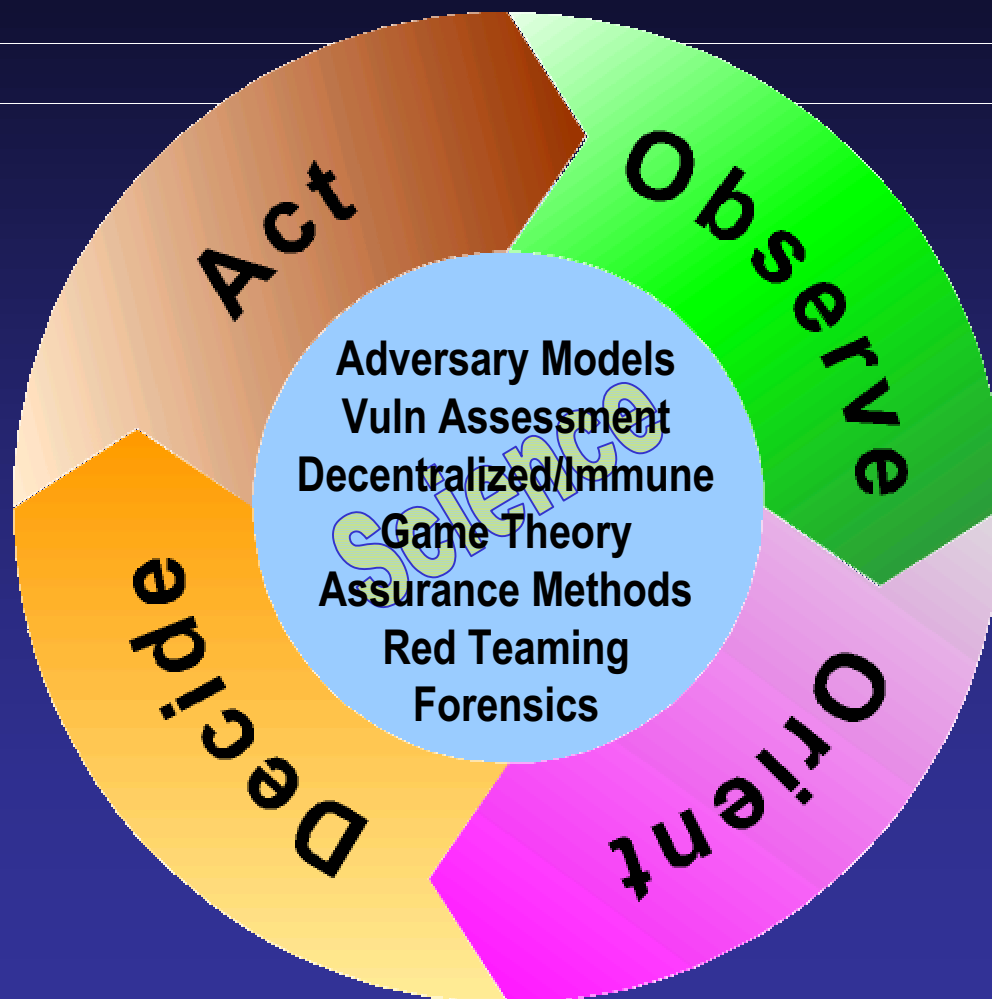
Decide

Act

Info Assurance Science & Engineering



Strategic Cyber Defense: *ISO*

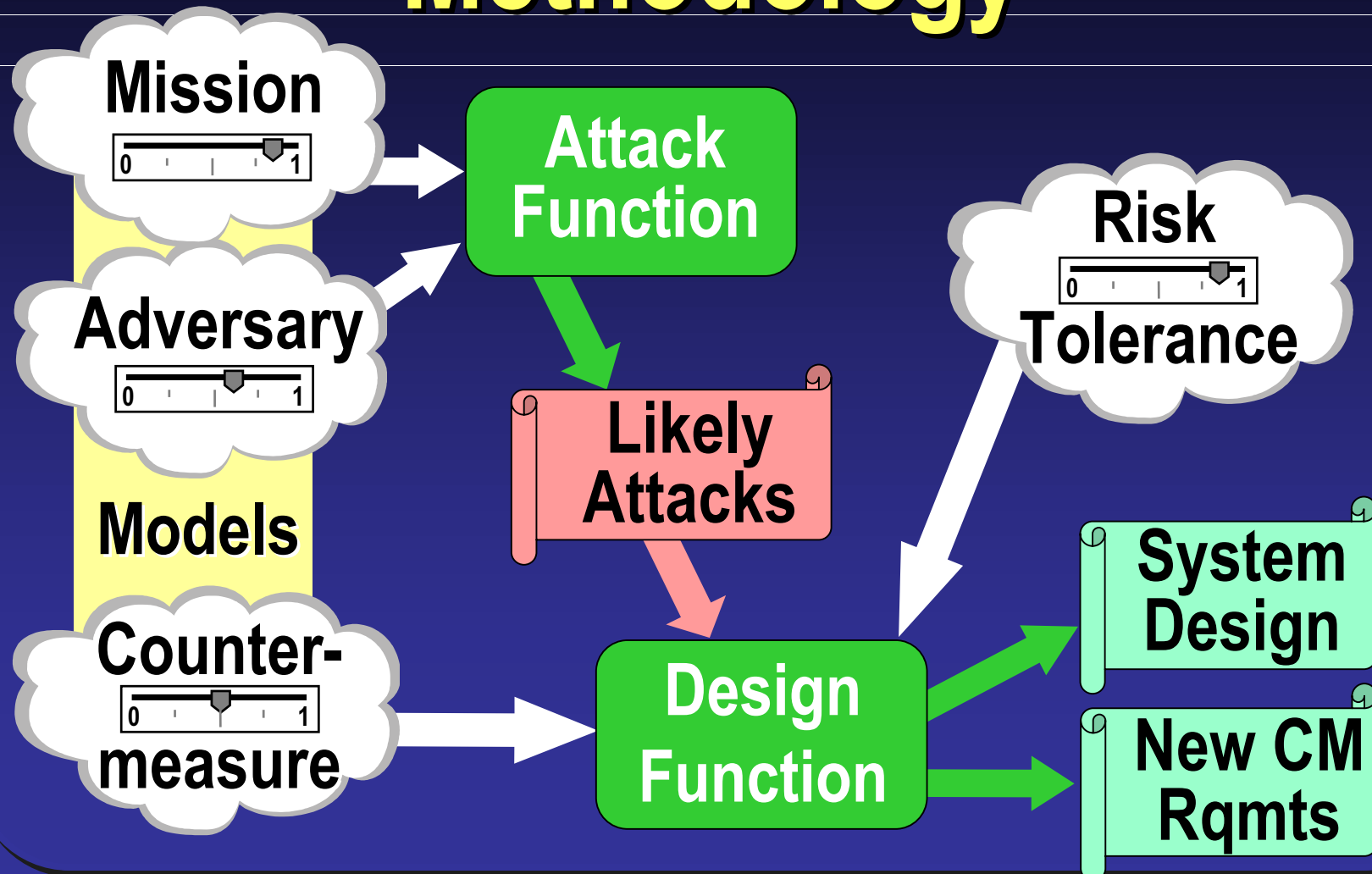


OODA View



System Assurance Methodology

ISO





ISO

Trustworthy Systems from Untrustworthy Components

